IN THE SPECIFICATION:

Page 1, after line 5 and before line 7, insert the following new paragraph:

--This application is a division of allowed Application No. 08/943,019, filed October 2, 1997.--

Please substitute the paragraph at page 4, lines 6-14 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--In probe methods using radioisotopes, labels containing radioactive atoms (radioisotopes) are used, and the detection sensitivity is satisfactory, and theoretically even one molecule (one copy) of the target nucleic acid can be detected. Such probe methods using radioisotopes, however, require special facilities, and the operation is accompanied by dangers. Further, since radioisotopes are unstable, probe nucleic acids labelled with radioisotopes cannot be stably stored for long time periods.--

Please substitute the paragraph beginning at page 4, line 15 and ending at page 5, line 2 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--In contrast, probe methods using conventional chemical staining methods or enzymatic staining methods are more practical since they do not require special

facilities, and the operation is relatively safe. Such probe methods using conventional staining methods are, however, markedly inferior in sensitivity to those using radioisotopes, and cannot sufficiently cope with detection of nucleic acids which can be obtained only in extremely small quantities, such as nucleic acids derived from organismal samples. Further, in many cases, probe nucleic acids bonded with labelling substances for such conventional staining methods are also unstable, and cannot be stored for long time periods.--

Please substitute the paragraph beginning at page 5, line 25 and ending at page 6, line 3 with the following replacement. A marked-up copy of this paragraph, showing the changes made, is attached.

--Furthermore, another object of the present invention is to provide a highly sensitive process for detecting a double-stranded nucleic acid in a sample with a simple procedure.--

Please substitute the paragraph on page 6, lines 10-13 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--According to an aspect of the present invention, there is provided a process for detecting a target single-stranded nucleic acid having a first base sequence comprising the steps of:--

Please substitute the paragraph beginning at page 6, line 25 and ending at page 7, line 3 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--According to another aspect of the present invention, there is provided a process for quantifying a target single-stranded nucleic acid having a first base sequence comprising the steps of:--

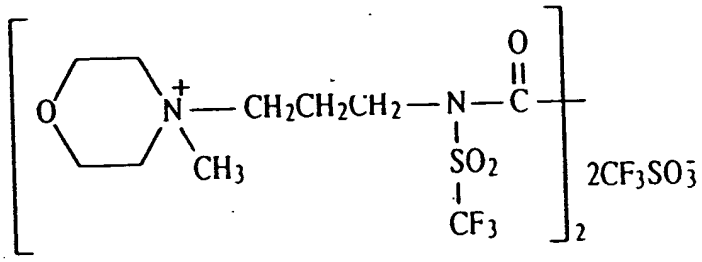
Please insert the following new paragraph on page 16, after line 12 and before line 13:

--As employed herein the term "attomole" means 10^{-18} mole. The symbol "fM" is an abbreviation for femtomole or 10^{-15} mole.--

Please insert the following new paragraph on page 26, after line 25:

--Compound 2 in Table 1 may be made by the prior art synthesis described in column 18, line 4 to column 19, line 19 and column 20, lines 1-5 of U.S. Patent No. 5,624,798 issued April 29, 1997, the aforesaid disclosure of which is herewith incorporated herein by reference.--

Please substitute the structural compound [30] on page 51, lines 19-23 with the following replacement structural compound [30] as follows. A marked-up copy of this replacement paragraph, showing the changes made, is attached.



[30]

Please substitute the paragraph beginning at page 52, line 4 and ending at page 53, line 2 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--Chemiluminescence can be detected in an appropriate medium capable of causing the chemiluminescent compound associated with a double-stranded nucleic acid to emit luminescence. An aqueous medium is preferred as a medium, since the medium can prevent the chemiluminescent compound in free state from emitting luminescence in the presence of a reagent causing the compound to emit luminescence. Examples of such a medium include water, aqueous buffered solutions, such as a phosphate buffered solution, Tris buffered solution, etc. The pH of such an aqueous medium preferably falls within a range in which the double-stranded nucleic acid and the chemiluminescent compound are stable. In the case of the compound represented by the general formula [1], the preferred pH range is from 5.0 to 8.0. Incidentally, although some of the compounds represented by the general formula [1] are capable of exhibiting chemiluminescence in a highly viscous

organic solvent such as dimethyl phthalate in the presence of a luminescence-inducing reagent such as the combination of hydrogen peroxide and bisdinitrophenyl oxalate (Compound 19) even in the absence of a double-stranded nucleic acid, such compounds do not exhibit chemiluminescence in the case where an aqueous medium is used instead of such an organic solvent.--

Please substitute the paragraph at page 66, lines 12-18, with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--Next, each 5 μl of a TE buffered solution containing 1 picomole of a probe DNA, M13 Primer M4 SEQ ID No. 1 d(GTTTTCCCAGTCACGAC) (manufactured by Takara Shuzo Co., Ltd.), which was previously subjected to a heat-shock treatment at 90°C was added to each well. In this state, the microplate was covered, and hybridization was carried out at 60°C for 18 hours while shaking.--

Please substitute the paragraph at page 73, lines 15-21, with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--Next, each 5 μl of a TE buffered solution containing 1picomole of a probe DNA, M13 Primer M3 SEQ ID No. 2 d(GTAAAACGACGGCCAGT) (manufactured by Takara Shuzo Co., Ltd.), which was previously subjected to a heat-shock treatment at 90°C

was added to each well. In this state, the microplate was covered, and hybridization was carried out at 60°C for 18 hours while shaking.--

Please substitute the paragraph at page 79, line 23 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--SEQ.ID No. 3 5'-NH_2-ATGCTGGCCGTGACGCACAGCA-3'--

Please substitute the paragraph beginning at page 83, line 21 and ending at page 84, line 1, with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made, is attached.

--The sequence of M13 primer M4 SEQ. ID No. 4 d(GTTTTCCCAGTCACGAC) is selected, and modified at the 5' end with an amino group based on the method of Example 11. The thus-synthesized probe DNA was immobilized to a microplate by covalent binding.

Please insert the following new paragraph on page 83, after line 16 and before line 18.

--This means that the weight of 1 x 10^{-21} moles of the target nucleic acid is 1 fg (femtogram).--

Please insert the following "SEQUENCE LISTING" after page 98 and before page 99.